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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,023	04/24/2001	Sung Lyong Lee	Q62058 4249	
7590 05/20/2005			EXAMINER	
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC			NATNAEL, PAULOS M	
2100 PENNSYLVANIA AVENUE, N.W. WASHINGTON, DC 20037-3213		ART UNIT	PAPER NUMBER	
			2614	

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		09/840,023	LEE, SUNG LYONG			
		Examiner	Art Unit			
		Paulos M. Natnael	2614			
The MAILING Period for Reply	DATE of this communication ap	pears on the cover sheet with the c	correspondence address			
THE MAILING DAT - Extensions of time may be after SIX (6) MONTHS from the period for reply specified by the same and the period for reply is second for reply within the Any reply received by the	E OF THIS COMMUNICATION. e available under the provisions of 37 CFR 1. om the mailing date of this communication. cified above is less than thirty (30) days, a rep pecified above, the maximum statutory period set or extended period for reply will, by statut	LY IS SET TO EXPIRE 3 MONTH(136(a). In no event, however, may a reply be tin bly within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE ng date of this communication, even if timely filed	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1) Responsive to	communication(s) filed on 121	November 2004.				
2a) This action is	FINAL. 2b)□ Thi	s action is non-final.				
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4a) Of the abo 5) ☐ Claim(s) 6) ☑ Claim(s) <u>1-8</u> i 7) ☐ Claim(s)		awn from consideration.				
Application Papers						
9)☐ The specificat	ion is objected to by the Examin	er.				
10) ☐ The drawing(s	0)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
Applicant may	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
_		ction is required if the drawing(s) is ob examiner. Note the attached Office	• •			
Priority under 35 U.S.	C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s) 1) Notice of References C	ited (PTO-892)	4) C 1-1	(PTO 442)			
2) 🔲 Notice of Draftsperson'	s Patent Drawing Review (PTO-948)	4)	ate			
3) Information Disclosure Paper No(s)/Mail Date	Statement(s) (PTO-1449 or PTO/SB/08) 5) Notice of Informal P 6) Other:	atent Application (PTO-152)			

DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims **1-8** are again rejected under 35 U.S.C. 103(a) as being unpatentable over Morrison, U.S. Pat. No. 6,591,292 in view of Mendenhall et al. U.S. Pat. No. 6,570,626.

Claim 1 is a method claim of claim 2 and, thus, Claim 1 is rejected for the same reasons as claim 2.

Considering claim **2**, Morrison discloses the following claimed subject matter, note; a) an OSD source remote controller for generating an OSD object display command on a screen, is met by Remote Controller 125, fig.2, which a user may utilize to enable an EPG to display and in response to the remote control signal, the System Controller 115 produces a signal OSD-RGB. (see col. 7, lines 63-67 and col. 8, line 66 through col. 9, line 10)

b) an OSD source for transmitting OSD display data by giving each OSD display data a peculiar ID in at least more than one OSD object unit and transmitting an OSD object ID and display location information... if there is an OSD object display command from said OSD source remote controller, is met by the system controller 115 in transport System 25, Fig.2, and by the disclosure that "The OSD menu may include an electronic program guide (EPG) as described above and other features discussed below. Data representing information displayed in the OSD menu is generated by system controller 115 in response to stored program guide information stored graphics information, and/or program guide and graphics information received via the input signal (e.g., StarSight data)..." (see col. 9, lines 2-11 and see also col. 8 lines 60-62)

c) a display apparatus for storing at least more than one OSD object display data received from said OSD source in a memory, reading OSD object display data having a corresponding ID from the memory in response to received OSD object ID and display location information, and displaying OSD object display data on a screen, is met by the system illustrated on Fig.2 as a whole comprising the transport system 25 which generates the OSD menu, decoder 85, storage devices 90 and 105, and of course by the display screen as illustrated in Figures 4-7.

Except for;

d) the claimed "transmitting an OSD object ID and display location information without transmitting any of the OSD display data";

Regarding d), Morrison does not specifically disclose transmitting ID and display location information without actually transmitting the OSD data itself. However, such a method of transmission in order to save bandwidth is notoriously well known in the art of video/audio data transmission. In this regard, Mendenhall et al., teach an on-screen display format that reduces memory bandwidth for on-screen display systems, wherein some of the OSD image are represented by data sets that do not include a color palette...[and] by not including a color palette in an OSD data set, the correspond OSD image can be represented with a smaller data set and can be transferred across a bus with a smaller bandwidth. (see Abstract) Therefore, it would have been obvious to the skilled in the art at the time the invention was made to modify the system of Morrison by providing the well known method of data transmission of Mendenhall wherein data included in another OSD data set is used instead to draw the desired OSD image, so that the system would save bandwidth and/or memory space by not transmitting the entire OSD data all the time

Considering claim 3, the OSD object display apparatus of claim 2, wherein the OSD source comprises:

- a) an MPEG source for supplying a detected MPEG transport stream to the display apparatus, is met by the transport decode 55, fig.2;
- b) an OSD generator for generating OSD display data in bitmap format, is met by the controller 115, fig.2;

c) a register for storing data, is met by the Smart Card 130, fig.2;

c) a controller for controlling the MPEG source, the OSD generator, and the register, is met by system controller 115 as well.

Considering claim 4, the OSD object display apparatus according to claim 3. wherein the register is an output asynchronous plug register, is met by the Smart Card 130, fig.2;

Considering claim 5, a command input part for receiving a command signal from the OSD source remote controller and providing the command signal to the controller, is me by the remote input interface 120, fig.2.

Considering claim 6, the OSD object display apparatus of claim 2, wherein the display apparatus comprises:

- a) an MPEG decoder for decoding an MPEG transport stream and outputting image data, is met by the Transport Decoder 55, fig.2;
- b) a buffer for buffering OSD data, is met by Packet Buffer 60, fig.2;
- c) an overlapper for overlapping the image data and the OSD data and providing overlapped data to the screen, is met by Application Interface 70, fig.2;
- d) a controller for controlling the MPEG decoder, the buffer, the overlapper, the memory, and the screen, is met by system controller 115, fig.2;

Considering claim 7, the OSD object display apparatus according to claim 6, wherein the OSD object display apparatus further comprises: a display apparatus remote controller, is met by remote control unit 125, fig.2 or Remote controller 1125, fig.1;

Considering claim **8**, a command input part for receiving a command signal from the display apparatus remote controller and providing the command signal to the 5 controller, is met by Remote Unit Interface 120 fig.2 or IR Receiver 1122, fig.1:

Response to Arguments

3. Applicant's arguments filed May 25, 2004 have been fully considered but they are not persuasive. The applicant argues that

"...although Mendenhall discloses not transmitting the color palette, Medenhall's system does transmit the pixel data portion of each of the OSD data sets. See FIG. 12 of Mendenhall. "The pixel data includes a value associated with each OSD pixel that specifies which color from the color palette is to be applied by the audio and video decoder to that pixel." Col. 2, lines 27-32. In other words, the pixel data is part of the OSD display data. Thus, even though some of Mendenhall's data sets are transmitted without the color palette, all of the data sets include OSD display data, i.e., the pixel data."

However, to the contrary, the examiner submits that the above quoted statement (col. 2, lines 27-32 of Medenhall) actually indicates to the skilled in the art that the pixel data includes a value and this value is a control information, as is well known in the

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computer art, because the value is used to specify which color is to be applied by the decoder. Furthermore, this information (or value) would not be needed or used when (or if) the color palette is not transmitted, as Mendenhall clearly proposes or teaches. col. 3, lines 28-50 [Note: "Value", as is being correctly interpreted here, is "a numerical quantity that is assigned or is determined by calculation or measurement", (see Webster's dictionary, 10th edition]. Therefore, to those with ordinary skill in the art it would be obvious to modify the system of Morrison utilizing the teaching of Mendenhall as has been shown above in the rejection. The argument is thus unpersuasive.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paulos M. Natnael whose telephone number is (571) 272-7354. The examiner can normally be reached on 10:00am - 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571)272-7353. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PMN

PMN May 11, 2005

SUPERVISORY PATENT EXAMINER

*FCHNOLOGY CENTER 2600